



PATENT  
0503-1154

IN THE U.S. PATENT AND TRADEMARK OFFICE

In re application of

Wolfgang BEILFUSS et al.

Conf. 2873

Application No. 10/663,257

Group 1615

Filed September 16, 2003

Examiner C. Hagopian

LOW-EMISSION FORMALDEHYDE DONOR PREPARATIONS AND  
USE THEREOF

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

May 12, 2008

Applicants request a pre-appeal brief review of the final rejection in the above-identified application. No amendments are being filed with this request.

A Notice of Appeal is filed herewith.

The review is requested for the reasons advanced on the attached sheets.

Respectfully submitted,

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REASONS IN SUPPORT OF REQUEST FOR REVIEW

A pre-appeal brief review is respectfully requested because the rejections include at least a clear factual error, or in the alternative, a clear legal error, as explained below.

Claims 18-21, 23, 30-48, 57, and 58 are not rendered obvious over SMITH et al. U.S. 7,078,005 B2 ("SMITH") over BEILFUSS et al. U.S. 2001/0021711 A1 ("BEILFUSS").

SMITH is offered for teaching a H<sub>2</sub>S scavenger product comprising(a) a reaction product of a carbonyl-containing compound with alcohol, thiol, amide, thiamide, urea or thiourea, and (b) an amine, e.g., N,N'-methylene-bisoxazolidine. The scavenger product is dissolved in a suitable solvent, including glycol, and may be with or without water, such as glycol.

BEILFUSS is offered for teaching bactericidal and fungicidal liquid preparations for industrial products comprising at least one bactericidal N-formal, with N,N'-methylenebis (5-methyloxazolidine) being preferred.

The Examiner's position is that one of ordinary skill in the art would have been motivated to include N,N'-methylenebis (5-methyloxazolidine) in the product of SMITH because of its known bactericidal properties and effectiveness in industrial products. The Examiner further states that a practitioner would reasonably expect the incorporation of N,N'-methylenebis (5-

methyloxazolidine) in the composition of SMITH would produce a H<sub>2</sub>S scavenger and/or a bactericidal composition.

However, this proposed combination fails to render obvious independent claim 18, as well as dependent claims 19-21, 23, 30-48, 57 and 58, for at least three reasons, as set forth below:

I. The combination fails to teach the features of claim 18.

The H<sub>2</sub>S scavenger product of SMITH includes a reaction product formed by reacting a carbonyl group-containing compound with, for example, urea. That is, the starting material comprises urea, and SMITH utilizes the product formed by the reaction between carbonyl group-containing compound and urea. See, e.g., column 1, lines 46-51 and column 2, lines 26-35.

The Examiner states that it is "applicant's burden to show that the completed reaction does not result in the presence of any urea".

However, the Examiner has not shown that SMITH discloses or suggests the desirability of obtaining a H<sub>2</sub>S scavenger product comprising unreacted urea.

Indeed, SMITH does not utilize unreacted reactants. Rather, the H<sub>2</sub>S scavenger product is based on products formed from a reaction, as evidenced by the Examples of SMITH, which do

not indicate the presence of unreacted reactants. See, e.g., the Examples and the Figures of SMITH.

The Examiner also maintains that the present claim language "is open-ended and does not exclude a reaction product utilizing urea or a urea derivative".

As to the claims not excluding "a reaction product utilizing urea", this expression is unclear. The reaction product is formed from urea reacting with a carbonyl-containing compound. Once urea reacts, there is no "urea" *per se* to "utilize".

As to "urea derivatives" not being excluded from the open-ended claim language, this is true, as evidenced by dependent claim 25. However, the independent claim 18 requires urea itself. Both SMITH, e.g., in light of column 2, line 27 to 35, and the present invention, e.g., in view of claim 25 and specification page 8, lines 6-12, distinguish between urea and its derivatives.

Thus, at best, the combination teaches a H<sub>2</sub>S scavenger product, which is formed from a reaction involving urea, to which the N-formal of BEILFUSS is added.

II. There is no teaching, suggestion, or motivation in SMITH to add a bactericidal material to the H<sub>2</sub>S scavenger product.

SMITH discloses an H<sub>2</sub>S scavenger product. The H<sub>2</sub>S scavenger is used to remove H<sub>2</sub>S from a hydrocarbon stream, e.g., sewage gas, natural gas, or natural oil. However, SMITH does not disclose any type of storage or shelf-life requirement for the H<sub>2</sub>S scavenger product, nor does SMITH disclose a need to preserve the product from microbial attack. See, e.g., column 5, lines 25-64.

To the contrary, SMITH suggests that there would be no need to add a bactericidal agent.

SMITH discloses that the possible scavenger products include ethylene glycol hemiformal and dimethylolurea, which are known bactericidal agents. Thus, one of ordinary skill in the art would have had no reason to add an additional a bacterial agent to produce a H<sub>2</sub>S scavenger and/or a bactericidal composition. See, e.g., column 4, lines 23-32.

Indeed, the only "preservative" that SMITH adds to the H<sub>2</sub>S scavenger product is an amine. The amine reduces or eliminates the formation of a solid during the use of the scavenger product, not for increasing storage time or shelf-life. See, e.g., column 6, lines 1-35.

III. There is no teaching, suggestion or motivation in BEILFUSS to add a particular N-formal to an H<sub>2</sub>S scavenger product.

BEILFUSS discloses preserving industrial products from bacterial and fungal attack during storage, such as cooling lubricants, cosmetic products, household products, cleaning products, crop protection compositions, seed treatment compositions, treating plants etc.

BEILFUSS neither discloses nor suggests that a H<sub>2</sub>S scavenger product for hydrocarbon streams including sewage gases or natural gas/oil require similar preservation from bacterial and fungal attack during storage. See, e.g., paragraphs 0001-0003 and 0017.

With respect to claims 38-40 specifically, the Examiner states that these claims include 0% water. However, these claims depend from claim 36, which recites a composition that "comprises water". Thus, for these claims there is an amount of water present, which is greater than 0%, and up to the amounts recited in claims 38-40.

Therefore, the rejection of claims 18-21, 23, 30-48, 57, and 58 should be withdrawn.

#### Conclusion

As shown above, the rejections of record include clear factual and/or legal errors and should be withdrawn and this application allowed, and such is respectfully requested.